

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A three-dimensional shape measurement apparatus comprising:
a first three-dimensional sensor having a projecting device for projecting a light pattern on a target area, and ~~[[a]]~~ an image capturing apparatus placed at a first interval from the projecting device to capture an image of the target area on which the light pattern is projected;

a second three-dimensional sensor having a projecting device for projecting a light pattern on the target area, and ~~[[a]]~~ an image capturing apparatus placed at a second interval longer than the first interval from the projecting device to capture an image of the target area on which the light pattern is projected;

three-dimensional information computing means for obtaining external shape information on an object present in the target area based on ~~the~~ a first shift of the pattern on ~~the~~ an image acquired with the first three-dimensional sensor~~[[;]]~~,

wherein said first shift of the pattern is a shift from a base image captured at a time point at which the object is not present in the target area to a captured image captured at an arbitrary time point at which the object is present in the target area;

variation information computing means for obtaining variation information on the object based on ~~[[the]]~~ a second shift of the pattern on the image acquired with the second three-dimensional sensor~~[[;]]~~, ~~and~~

wherein said second shift of the pattern is a shift from a reference image captured at a first arbitrary time point at which the object is present in the target area to a captured image captured at a second arbitrary time point after the first arbitrary time point with enough time interval for detecting a movement of the object and at which the object is present in the target area; and

information composing means for composing the external shape information and the variation information.

2. (Original) The three-dimensional shape measurement apparatus as recited in claim 1, wherein the information composing means corrects the variation information based on the external shape information.
3. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 1, wherein the information composing means performs the composition so as to find out the movement of each point of the object.
4. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 2, wherein the information composing means performs the composition so as to find out the movement of each point of the object.
5. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 1, further comprising information output means for displaying the composed results of the information composing means.
6. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 2, further comprising information output means for displaying the composed results of the information composing means.
7. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 3, further comprising information output means for displaying the composed results of the information composing means.
8. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 1, wherein the light pattern is an array of bright spots.
9. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 2, wherein the light pattern is an array of bright spots.
10. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 3, wherein the light pattern is an array of bright spots.

11. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 1, wherein the three-dimensional information computing means performs interpolation for points that lack the external shape information.

12. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 2, wherein the three-dimensional information computing means performs interpolation for points that lack the external shape information.

13. (Previously Presented) The three-dimensional shape measurement apparatus as recited in claim 3, wherein the three-dimensional information computing means performs interpolation for points that lack the external shape information.